

# OWNER'S REFERENCE GUIDE

Zen Hot Tubs 121 S. 39<sup>th</sup> Ave. Suite 2 Phoenix, AZ 85009 866-939-0851

- **\*** Many troubleshooting inquiries can be handled by your dealer by phone.
- Side panel removal allows easy access to all interior spa plumbing for easy inspection or repair, allowing for total jet accessibility in seconds rather than minutes.
- Most parts are readily available from the factory, if not already in stock at your local dealer.

## **Quick Tip Guide**

- 1. For hook up, use a dedicated circuit (15 Amp minimum, 20 Amp recommended) within the cord distance.
- 2. Spa cover must be closed for the spa to properly heat. Heating time depends on air temperature but generally the spa will average 24 to 48 hours to heat. The spa will automatically filter twice a day for 1/2 hour each time. The pump will continue to run until reaching the set temperature. The spa cord has a GFCI protection device. If it repeatedly trips, disconnect the plug from the receptacle until the fault has been identified and corrected by a spa technician.
- 3. If an extension cord is used, it must be as short as possible and at least 10 gauge (for outdoor use). Inferior cords may cause spa controls to malfunction and void your equipment warranty.
- 4. The heating spa will cause condensation to form on the outside and bottom of the spa which may cause reason to believe the spa is leaking. For this reason, small "leaks" should be allowed a few days prior to further investigation.
- 5. The spa pump has an automatic high temperature shut off. If the motor stops, it will auto start after it cools.
- 6. All tubing, manifolds, valves, etc. can be easily accessed throughout the spa by removing the panels.

# Zen Hot Tubs Startup

## \* <u>Selecting Zen Hot Tubs Site Location</u>

It is important your new spa be installed on a solid, flat, and level surface that is engineered to carry a load of 75 pounds per square foot. Spas should not be placed near or below electrical or telephone cables. If there is not a dedicated 120v receptacle within 10' of your spa, contact a **Licensed Electrician** to supply power near the spa. A GFCI Power Cord is supplied with all 120v applications.

# \* <u>Filling Your Spa</u>

Unthread and remove the filter. Put garden hose in the void where the filter was. This will help to eliminate air locks. With the electrical breaker in the OFF position and/or the power cord unplugged, fill to an approximate water level of 2" above the top of the highest jet.

## \* <u>Relieving Air Locks</u>

Occasionally, on a fresh fill or refill, an air lock may occur. This is caused by the build up of air in the plumbing lines which will not allow water or air to flow through the jets. If left un-attended, the pump can overheat from lack of water flow. This type of damage is not covered under the warranty. The easiest way to remedy this situation is to repeatedly cycle between low- and high-speed on the topside controls. If this does not fix the issue you will have to open the vented access panel that houses the pump. Once the panel is removed, locate the pump and you will see two large, white nuts attached to the pump. One is horizontal to the pump in high-speed. Continue to loosen the nut until the jets begin to work. Doing this will cause water to come out the nut you are loosening which is normal. Once the jets are functioning properly, tighten the nut back up and put the panel back on.

# \* <u>Air Adjustment</u>

To introduce air into the jets, turn the air controls (located on the spa's top edge) counterclockwise. To decrease air flow, turn the air controls clockwise.

# \* Suction Fitting

Keep the suction fitting (located in the foot well area) of the spa unobstructed and free from debris at all times. Only remove the suction-fitting screen for cleaning. Never remove it while the spa is connected to electrical power.

# **Care and Maintenance Instructions**

# \* <u>Cleaning the Filter Cartridge</u>

- 1. Disconnect power
- 2. Remove the filter cover
- 3. Unthread the Filter Cartridge counterclockwise
- 4. Rinse dirt and debris away thoroughly with a garden hose
- 5. Replace filter cartridge and cover
- 6. Reconnect power

# \* Water Chemistry

Read and understand the spa chemistry guidelines supplied by your dealer or local chemical supplier. There are many solutions available to balance your water chemistry. If you are unfamiliar with water chemistry, your best option is to work with your dealer or your local chemical supplier. It is unhealthy to use your spa when the water is not in proper chemical balance.

## Warning:

Do not use Calcium Hypochlorites, Trichlors or Bromine. Doing so may cause corrosion to your pump and possibly fade your spa surface. This will not be covered under the warranty.

## \* Minimum Weekly Maintenance

- 1. Test water for chlorine and pH
- 2. Adjust pH to 7.2-7.8
- 3. Adjust chlorine to 1-3ppm

# \* Vinyl Covers

- 1. Soft top covers are composed of a vinyl skin and high-density foam insert. They have straps and two-part clips which are attached to the spa.
- 2. The vinyl surface can be cared for with any mild household cleanser or products made for the care and maintenance of vinyl products.

# \* <u>Cleaning Your Zen Hot Tubs</u>

- 1. The filter should be cleaned every 3-6 months with your garden hose. You may also choose to use a filter cleaner. Follow the directions provided with the cleaner.
- 2. If the shell gets dirty, you can simply use pressurized water to clean the majority of the dirt. In some cases, you may need to use a mild soap and water solution. In this instance, you will need to thoroughly rinse the spa. If not, you will have an issue with bubbles.
- 3. Refill spa with fresh water to the recommended level. The water line should cover all the upper jets in the spa. If you encounter an air lock, refer to the "Relieving Air Locks" section above.

# **Troubleshooting**

## \* <u>"Why Is My Spa Constantly Running?"</u>

All Zen Hot Tubs are fitted with state-of-the-art technology that automatically filter your spa as well as check to ensure the spa is always at the desired temperature. Part of this process is that the spa pump runs twice a day for at least 1/2 hour each time to filter. Additionally, the pump runs once every 30 minutes to verify that the spa is at the correct temperature. So, while it may seem the spa is constantly running, this is simply part of the heating and filtration process. If you still feel the spa is running constantly, please contact your dealer.

## DO NOT LEAVE SPA EMPTY FOR EXTENDED PERIODS OF TIME. LEAVING THE SPA EMPTY MAY RESULT IN THE JET HOUSING GASKETS DRYING OUT, CAUSING LEAKS AND/OR WARPING. THIS TYPE OF DAMAGE IS NOT COVERED UNDER THE WARRANTY.

# **IMPORTANT SAFETY INSTRUCTIONS**

# **READ AND FOLLOW ALL INSTRUCTIONS**

## TO REDUCE THE RISK OF INJURY:

- Spa water should never exceed 40° C (104° F). Water temperatures between 38° C (100° F) and 40° C (104° F) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 15-20 minutes) and for younger children.
- Excessive water temperature has a high potential for causing fetal damage, during the early months of pregnancy, pregnant or possibly pregnant women should limit spa temperatures to 30° C (100° F).
- Before entering a spa, the user should measure the water temperature with an accurate thermometer since the tolerance of temperature regulating devises may vary as much as plus or minus 3° C (5° F).
- The use of alcohol, drugs or medication before or during spa use may lead to unconsciousness with the possibility of drowning.
- Persons suffering from obesity or with a medical history of heart disease low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.
- Persons using medication should consult a physician before using a spa. Some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.
- $\clubsuit$  Do not sit or stand on the edge of the spa or cover.

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temp plus or minus temperature of 98.8° F. The symptoms of hyperthermia include dizziness, fainting, drowsiness, lethargy and an increase in the internal body temperature. The affects of hyperthermia include (1) unawareness of impending hazard, (2) Failure to perceive heat, (3) Failure for the need to exit the Spa, (4) Physical inability to exit Spa, (5) Fetal damage to pregnant women, and (6) Unconsciousness resulting in a danger of drowning.

WARNING The use of Alcohol, Drugs or medication can greatly increase the risk of fatal hyperthermia.

# **DANGER: RISK OF ELECTRIC SHOCK**

Do not permit any electric appliance such as a light, telephone, radio, or television within 5 feet of a spa or hot tub.

# **IMPORTANT SAFETY INSTRUCTIONS**

# **READ AND FOLLOW ALL INSTRUCTIONS**

WARNING: CHILDREN SHOULD NOT USE SPA OR HOT TUBS WITHOUT ADULT SUPERVISION

WARNING: DO NOT USE SPAS OR HOT TUBS UNLESS ALL SUCTION GUARDS ARE INSTALLED TO PREVENT BODY AND HAIR ENTRAPMENT

WARNING: PEOPLE USING MEDICATIONS AND/OR HAVING ADVERSE MEDICAL HISTORY SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB.

WARNING: PEOPLE WITH INFECTIOUS DESEASES SHOULD NOT USE A SPA OR HOT TUB

WARNING: TO AVOID INJURY EXERCISE CARE WHEN ENTERING OR EXITING THE SPA OR HOT TUB

WARNING: DO NOT USE DRUGS OR ALCOHOL BEFORE OR DURING THE USE OF A SPA OR HOT TUB TO AVOID UNCONSCIOUSNESS AND POSSIBLE DROWNING

WARNING: PREGNANT OR POSSIBLY PREGNANT WOMEN SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB

## **IMPORTANT SAFETY INSTRUCTIONS**

## **READ AND FOLLOW ALL INSTRUCTIONS**

WARNING: BEFORE ENTERING THE SPA OR HOT TUB MEASURE THE WATER TEMPERATURE WITH AN ACCURATE THERMOMETER

WARNING: DO NOT USE A SPA OR HOT TUB IMMIDIATELY FOLLOWING STRENUOUS EXERCISE

WARNING: PROLONGED IMMERSION IN A SPA OR HOT TUB MAY BE INJURIOUS TO YOUR HEALTH

WARNING: DO NOT PERMIT ELECTRIC APPLIANCES (SUCH AS A LIGHT, TELEPHONE, RADIO OR TELEVISION WITHIN 1.5 M OF THIS SPA OR HOT TUB

CAUTION: MAINTAIN WATER CHEMISTRY IN ACCORDANCE WITH THE MANUFACTURE'S INSTRUCTIONS

# WARNING

Connect to a grounded, Grounding Type Receptacle Only To reduce the risk of electric shock, replace damaged cord immediately <u>DO NOT BURY THE CORD</u>

# **DANGER**

To reduce the risk of injury to persons, DO NOT REMOVE Suction Fittings



## Feature Function List BWG HJ81

### BWG, Heat Jacket Control System, Model: HJ81

The HJ81 is "heat jacket" software. (It turns on the pump to heat; there is no separate heater.)

- Software program: HJ81R1A
- 15A power configuration

• Mini bath panel (VL200/240/260)

- Pump & Light status indicator lights
- Digital temperature display Set Temperature Range 60° F 104° F, Default 100°F
- Automatic timeouts for each function: 12V Light (on/off): 4 Hrs
  120V Pump (on/off): 15 minutes
- Settable filter cycle: Two cycles per day. First starts one minute after start up. Second starts 12 hours later. Duration is programmable for 0, 30, 60 min. Default is 30min.

To program, press  $\wedge$  or  $\vee$ , then press Jets to enter program, then press  $\wedge$  or  $\vee$  to adjust, finally press Jets to exit programming.

- Standby mode press ↑ or ↓, then light "Sb"
   120V Pump and Light relays will open. Press any key to Cancel Standby mode
- Pump turns On when water temperature is 2° F below set temperature and turns Off when water temperature is 1°F above set temperature.
- Freeze protection 40° F (Not Functional after High-Limit Protection engages)

• 120V GFCI cord connect •



## Feature Function List BWG HJ81

- Diagnostic message display LCD screen
  - \* Sensor failure detection "Sn"
  - \* Either high-limit or water temp overheat detection "OH"
- High-limit protection 2 levels: software and hardware
  - \* High-limit detection "OH" at 118°F (Software) / at 116°F (Hardware)
  - \* Panel button press required to reset high-limit "OH" fault at 112°F or below
- \* Water temp. overheat detection "OH" at 107°F
- Automatic water-temp "OH" reset at 106°F
- Overheat prevention at 106°F:
  - \* Filter is disabled when water temperature reaches 106°F.
  - \* Filter is re-enabled when water temperature falls to 105°F.
  - \* Pump can still be manually turned on/off when the filter is disabled.



## TO ALL ORIGINAL PURCHASERS OF THIS PRODUCT

#### **5- YEAR WARRANTY**

Zen Hot Tubs warrants the entire spa shell surface against water loss and structural integrity due to defects in the spa for 5 years. For original purchaser only, warranty is non-transferable:

During the period of five (5) year proration, you will be responsible to pay Zen Hot Tubs a percentage of the purchase price (the price that appears on the original sales receipt) of the warranty covered item as follows:

Year 1=0% Year 2=25% Year 3=50% Years 4-5=75%

#### **1- YEAR EQUIPMENT WARRANTY**

The Original Manufacturers provide limited warranties on the "Topside" Controls, Master Control center, and Pump for 1 year from date of manufacturing.

#### **1- YEAR PARTS WARRANTY**

The Original Manufacturers provide limited warranties on all Plumbing and Fittings, Wiring, Cords, GFCI, Jets, Vinyl Spa Covers, Pillows, and other non-electrical mechanical parts for 1 year.

#### **90-DAY LABOR WARRANTY**

Zen Hot Tubs warrants all the labor involved with manufacturing defects for 90 days from date of purchase. This does not include electrical issues, ozone systems, issues with air locks or other issues that do not arise from defects in manufacturing.

#### PERFORMANCE OF WARRANTY

Zen Hot Tubs shall repair or replace (at our option) warranted product if it fails or becomes defective during the warranty period. To obtain service in the event of a defect covered by this warranty, contact your Zen Hot Tubs dealer as soon as possible and take appropriate precautions to prevent further damage to your spa. Zen Hot Tubs or a designated service technician will correct the defect subject to the terms in this warranty. In the event that a replacement or repair is necessary, costs for the removal of the defective spa, shipping costs for the replacement or repaired spa, and delivery and installation of the replacement or repaired spa will be the responsibility of the spa owner.

#### **EXCEPTIONS TO WARRANTY**

- 1. Any damage caused by negligent misuse, improper installation, improper water chemistry, and/or failure to follow instructions in the Owners Manual.
- 2. Cartridge filter elements, light bulbs, foam, insulation, and cover straps.

This warranty is void if the spa has been subject to any alteration, misuse, or abuse. Alteration shall include any component or plumbing change, electrical conversion, or the addition of any sanitation or water purification device or heating system, which contributes to a component or unit failure or unsafe operating system. Misuse and abuse shall include use of the spa in an application for which it is not designed. **Specifically: Damage caused by clogged or dirty cartridges, damage/discoloration to the spa surface caused by harsh chemicals or chemical misuse, and damage/discoloration to the spa surface caused by harsh chemistry maintenance. Damage to the spa surface caused by leaving the spa uncovered or without water, for long periods of time.** 

Zen Hot Tubs shall not be liable for injury to any person or any claim for damage however it shall arise. All consequential expenses including loss of use, transportation charges arising out of alleged deficiency of spa are specifically excluded. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Some states do not allow the exclusion of consequential damages, so the above limitation may not apply to you.

#### Zen Hot Tubs 121 S. 39th Ave., Suite 2, Phoenix, AZ 85009

TO ALL ORIGINAL PURCHASERS OF ITS PRODUCT			
Zen Hot Tubs 121 S. 39 <sup>th</sup> Ave. Suite 2 Phoenix, AZ 85009		Warranty Registration: Mail this in with a copy of your invoice or contract.	
	Name:	Dealer Name:	
	Address:	City:	
	State: Zi	Phone: Phone:	
	Spa Model & Seria	#: Date of Purchase//	